

DETAILED ACTION

Continued Examination under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/03/2008 has been entered. Claims 1, 6, 9 and 14 are amended. Claims 17-24 are cancelled. Claims 1-4, 6-12, 14-16 and 25-32 are currently pending.
2. Amendment received on 10/15/2007 was entered into record. Claims 1-2, 4, 6-7, 9-12, 14-17 and 23-24 were amended. Claims 5 and 13 were cancelled.
3. Preliminary amendment received on 03/17/2004 was entered into record. Claims 1, 9 and 18 were amended.

Priority

4. This application has no priority claim made. The filing date is 09/30/2003.

Examiner's Amendment

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

6. Authorization for this examiner's amendment was given in a telephone interview with Jose Gutman (Reg. No. 35,171) on 06/18/2008.

7. The application has been amended against applicant submitted claim set dated 04/03/2008 as follows (only examiner amended claims are shown):

IN THE CLAIMS

31. (Canceled)

32. (Canceled)

Reasons for Allowance

8. Claims 1-4, 6-12, 14-16 and 25-30 are allowed as amended above.

The following is an examiner's statement of reasons for allowance:

The closest prior art of record issued to Wolff (US 6067545 A) fails to teach or suggest "a method comprising: receiving, from a user, a desired end state associated with an autonomic computing system and a set of resource relationships associated with a set of resources for accomplishing the desired end state, wherein the desired end state indicates an operational state associated with a component to be achieved by the autonomic computing system by utilizing one or more resources in the set of resources without violating relationship specifications associated with the set of resources, and wherein the set of resource relationships received from the user only specify relationships associated with a top-most level set of resources in the set of resources, wherein the availability of one or more of the top-most level set of resources is dependent on the availability of one or more resources of a lower level set of resources in a reverse hierarchy of dependencies from top-most level to lowest level set of resources; discovering a set of implicit relationships associated with at least the set of resources, wherein the set of implicit relationships at least indicate one or more of a set of resource dependencies for at least one resource in the set of resources and location requirements for at least one resource in the set of resources, and wherein the set of implicit relationships are discovered automatically without the user explicitly specifying the implicit relationships, wherein the set of implicit relationships are relationships associated from the top-most level set of resources to a lower level set of resources in the set of resources; determining, in response to the receiving, policy definitions associated with the set of resources for achieving the desired end state associated with

the autonomic computing system: wherein the policy definitions are determined based on the set of resource relationships received from the user and the implicit relationships that have been discovered, and wherein the policy definitions define at least one of operational policies indicating how to operate the set of resources and selection policies indicating how to select resources in the set of resources to achieve the desired end state; generating a system-wide directed graph, based on at least the set of resource relationships received from the user, the implicit relationships that have been discovered, and the policy definitions that have been determined that specifies a set of interrelations between the set of resources; monitoring applicable each resource in the set of resources for status information associated with each resource, wherein the status information indicates a resource associated with the status information has achieved a desired end state associated with the resource, wherein the desired end state of the resource indicates at least an operational state of the resource to be achieved by the autonomic computing system in order to achieve the desired end state of the autonomic computing system; determining, based on the monitoring, if the autonomic computing system is at the desired end state, wherein the autonomic computing system is at the desired end state if each resource in the set of resources being utilized by the autonomic computing system to achieve the desired end state has achieved their own desired end states; and dynamically modifying resource states, in response to determining the autonomic computing system is not at the desired end state, by sending an instruction for at least one resource to perform an available action based on the policy definitions and the system-wide directed graph, wherein the available action is at least one of come on-line, go off-line, reset, and a combination thereof, and wherein the at least one resource is at least one of a resource in the set of resources and a new resource

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identified in the system-wide directed graph” in combination with all the elements of each independent claim as argued by Applicant [See last paragraph on page 20, last paragraph on page 21, 2nd paragraph on page 23, middle of page 25, middle of page 26, last paragraph on page 27 and 1st paragraph on page 28]. Applicant argues that the prior art does not disclose or suggest “wherein the desired end state indicates an operational state associated with a component to be achieved by the autonomic computing system by utilizing one or more resources in the set of resources without violating relationship specifications associated with the set of resources”; “wherein the set of implicit relationships at least indicate one or more of a set of resource dependencies for at least one resource in the set of resources and location requirements for at least one resource in the set of resources, and wherein the set of implicit relationships are discovered automatically without the user explicitly specifying the implicit relationships, wherein the set of implicit relationships are relationships associated from the top-most level set of resources to a lower level set of resources in the set of resources”; and “generating a system-wide directed graph, based on at least the set of resource relationships received from the user, the implicit relationships that have been discovered, and the policy definitions that have been determined that specifies a set of interrelations between the set of resources”. These argument are considered persuasive in light of the additional claim language changes, particularly the limitations of “monitoring applicable each resource in the set of resources for status information associated with each resource, wherein the status information indicates a resource associated with the status information has achieved a desired end state associated with the resource, wherein the desired end state of the resource indicates at least an operational state of the resource to be achieved by the autonomic computing system in order to achieve the desired end state of the

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autonomic computing system” as per applicant’s amendment dated 04/03/2008 as well as the enabling portions of applicant’s original specification.

The dependent claims further limit the independent claims and are considered allowable on the same basis as the independent claims as well as for the further limitations set forth. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/P. A. S./
Examiner, Art Unit 2144
/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2144